## Lower Basin Drought Contingency Proposal

The Colorado River system has experienced extensive drought conditions for more than 16 years. As a result, water levels in Lake Mead, the primary storage reservoir for the Lower Basin states, and the entire Colorado River System have been rapidly declining and projections indicate that this will continue into the foreseeable future. Lake Mead water levels are important because they determine whether a shortage is declared on the Colorado River. All the states that share the river, the federal government and Mexico previously agreed to shortage "trigger levels" and resulting reduced delivery amounts in the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead. These were developed based on data that was available at that time, very early in the Colorado River drought. Now, nearly 10 years later it is apparent that those guidelines are not enough. New river flow projections indicate that Lake Mead levels could drop to the point of seriously impacting power generation and water availability, despite the Shortage Sharing Guidelines. So, the Lower Basin Drought Contingency Proposal (DC Proposal) has been drafted to protect Lake Mead in a way that improves the health of the river system and shares the burden of reductions among Arizona, California, Nevada and the United States while still honoring the previous agreements.

### What is the Drought Contingency Proposal?

The DC Proposal is still a work in progress. The goal is to protect Lake Mead's elevation from dropping to critical levels by sharing responsibility for protecting the system among all Lower Basin Colorado River users, including California. It specifies voluntary reductions for each of the Lower Basin states--Arizona, California and Nevada-in order to protect the water elevation in Lake Mead.

### Why is it important to protect the water elevation in Lake Mead?

A Colorado River shortage declaration is based on the water levels in Lake Mead. By preventing the water elevation in Lake Mead from dropping to levels that would trigger worsening shortages, the entire river system and all its users benefit. If, however, the water levels dip too low, and there is not a plan in place to protect Lake Mead, the ability to resolve the issues become much more difficult. Moreover, if the local water users cannot agree to a plan to protect Lake Mead, it is unknown what measures the US Secretary of the Interior will take.

## Why do we need the Drought Contingency Proposal now?

While Arizona is not currently facing a water crisis, falling water levels in Lake Mead mean all Colorado River users are facing an uncertain future without additional proactive efforts. At the lower lake levels there is uncertainty regarding what actions the federal government may take and how even Arizona's higher priority users may be affected. Taking additional actions now will help ensure that Lake Mead will continue to serve the needs of Lower Basin water users.

## What are the benefits of the Drought Contingency Proposal?

Declining water and power supplies will have far reaching impacts. By working together and voluntarily agreeing to the DC Proposal, all Lower Basin states will enact temporary reductions to protect Lake Mead's elevation from dropping to critical levels. This is not a permanent loss of water entitlement, so when the system recovers we could choose to restore our uses.

## How do the water reductions impact Arizonans?

Under the DC Proposal, Arizona agrees to take earlier reductions in its share of the Colorado River than those outlined in the 2007 Shortage Sharing Guidelines to stabilize the level of Lake Mead. This strategy allows the lake level to better withstand long-term shortages without falling as quickly. The State of Arizona is working with all Colorado River water users in Arizona to determine how water reductions will be shared.

## Has Arizona already agreed to the Drought Contingency Proposal?

No. While Arizona representatives have participated in the development of DC Proposal, Arizona will not commit to the proposal without consensus among Arizona water users is reached and firm commitments are received from California, Nevada and the United States. Additionally, any agreement will require approval from the Arizona State Legislature. Discussions among Arizona water users to consider the risks and benefits of the DC Proposal and how it could be implemented within Arizona are currently underway. Success will require participation of all those who depend on Colorado River water.

#### For more information:

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## **KEY TERMS**

#### Acre-foot:

The fundamental measure of water employed by water managers. It has three primary definitions: 1) 325,851 gallons; 2) Enough water to supply the needs of three to four urban, Southwestern families for a year; and, 3) Enough water to cover an acre of land one foot deep.

#### Allocation:

For these purposes, the amount of Colorado River water to which each Lower Basin state has legal rights. As a result of a series of federal court cases beginning in 1931, California's "allocation" is set at 4.4 million acre feet annually, Nevada's is 300,000 acre feet, and Arizona's is 2.8 million acre feet.

#### **Arizona Water Banking Authority:**

A water "banking" agency that stores in underground aquifers Arizona's as-yet unused allocation of Colorado River water. The agency also assists California and Nevada by temporarily banking their allocations.

#### **Bureau of Reclamation:**

Division of the federal Interior Department responsible for the health and management of the Colorado River system.

#### **Central Arizona Project:**

The 336-mile system of canals, tunnels and aqueducts, pumping plants and pipelines that annually delivers more than 1.5 million acre feet of Colorado River water to Central Arizona, serving five million people.

#### **Deadpool:**

An as-yet unknown depth level of Lake Mead at which the reservoir ceases to provide water.

#### **Declaration of Shortfall:**

The federal Secretary of the Interior oversees the Colorado River system and would declare a shortage if the there is insufficient water in Lake Mead to deliver the 7.5 million acre-feet of annual allocations to the Lower Basin states. There are three shortage levels, or "tiers," all of them tied to water levels in Lake Mead. A Tier 1 shortage is declared when Lake Mead falls below elevation 1,075 feet. The second, Tier 2, when it falls below elevation 1,050 feet. A Tier 3 level of shortage is declared when the lake descends below elevation 1.025 feet. Each subsequent "tier" would require increasingly greater response by the states to assure Lake Mead's stability.

#### **Drought Contingency Planning:**

On-going efforts among Lower Basin Colorado River states and their water-users to reach agreement on how best to resolve potential shortfalls in annual Colorado River allocations caused by drought and chronic over-allocation.

#### Firming:

"Firming" means finding an alternative water supply to replace a portion of a reduced water supply during a shortage.

# Intentionally Created Surplus (ICS):

Water previously conserved by a Colorado River contractor in Lake Mead under the terms of a forbearance agreement. The contractor may request delivery of the ICS in a subsequent year, but the temporary storage of the water supports the water elevation in Lake Mead.

#### Lake Mead:

Created in 1936 with the construction of Hoover Dam, Mead is the largest reservoir in the U.S. when full at almost 29 million acre-feet. It is fed by Colorado River water released through Glen Canyon Dam. As of May 8 2016, Mead was 37 percent full.

#### **Lake Powell:**

Created in 1963 with the construction of Glen Canyon Dam, Powell is the second-largest reservoir in the U.S., after Lake Mead when full at roughly 24 million acre-feet. As of May 8, 2016, Powell was 45 percent full.

#### **Lower Basin States:**

Arizona, California and Nevada.

#### **On-river water:**

The portion of Arizona's annual 2.8 million acre-foot Colorado River allocation that is consumed by users directly from the river itself. (See: Central Arizona Project).

#### **Upper Basin States:**

Colorado, New Mexico, Utah and Wyoming.

#### Wet Water:

Real, tangible water, as opposed to an official allocation. A water user may have a legal right to use a certain amount of water (sometimes called a "paper right"), but "wet water" refers to the water that is actually available to that user after taking into account hydrology, infrastructure, and other potential obstacles to water use.